

TROPICAL DEPRESSION 21W

Forming at the end of a northward-displaced monsoon trough, Tropical Depression 21W followed an "S"-shaped poleward-oriented track close on the heels of Typhoon Piper (20W) (Figure 3-21-1). Emerging rather quickly from the end of the monsoon trough, the tropical disturbance that became TD 21W was never mentioned on the Significant Tropical Weather Advisory, but rather, a Tropical Cyclone Formation Alert (TCFA) was issued at 252330Z August followed immediately by a warning valid at 260000Z. Remarks on the TCFA included:

"A tropical disturbance has developed within the monsoon trough, between Tropical Storm Piper (20W) and Typhoon Orson (19W). Upper-level data favors continued development. At this time, the system is expected to follow Piper (20W) up the midlatitude trough axis. A warning message is forthcoming."

Soon after the first warning, TD 21W lost most of its central deep convection and it failed to mature (although a well-defined LLCC persisted). The final warning was issued valid at 271200Z,

when it was thought that the LLCC of TD 21W was going to dissipate over water. The LLCC did not dissipate, however, and in post analysis it was carried as a 25 kt (13 m/sec) tropical depression for another 60 hours as it recurved on the final leg of its "S"-shaped track.

Figure 3-21-1 Tropical Depression 21W is forming at the end of the monsoon trough. With Piper (20W) to its north, and Orson (19W) to its southwest, TD 21W is set to move north and leave a vacancy at the end of the trough to be filled by yet another TC, Rick (22W) (252224Z August visible GMS imagery).

